What a Right-of-way Manager has learned during Operational Treatments

Howard Peavey, Senior Agronomist
Alabama Department of Transportation

Background
In the early 1970's, as a result of his project work, Dr. Ray Dickens, Auburn Univ., recognized the invasive potential of Cogongrass and recommended an eradication program be started. He was largely ignored.

By the 1990’s increased roadside safety hazards due to fires and rising expenses stemming from increases in mowing and equipment maintenance costs forced ALDOT to acknowledge the problems associated with Cogongrass and search for solutions.

In 2000 the Alabama Department of Transportation (ALDOT) funded a Auburn University Research Project 930-486 “Mapping, Control, and Re-vegetation of Cogongrass Infestations on Alabama Rights-of-Way” (project data, summary and recommendations can be found on the ALDOT website). Herbicidal treatment and seeding recommendations determined by this research were as follows:

- Treatment of infestations with glyphosate (greater than or equal to 3 lb ai/acre) or glyphosate plus imazapyr at 1.5 + 0.38 lb ai/acre in the fall, followed by drill seeding of a cover crop, followed by spring treatment of re-growth with glyphosate (greater than or equal to 3 lb ai/acre) and drill seeding of a bermudagrass/bahiagrass mixture (2:1) at 30 lb/acre. Herbicide application should be made in at least 15 gal/acre of solution to insure adequate coverage. This treatment program should be repeated yearly for 3 years.

ALDOT’s Program:
- Herbicide Treatment: ALDOT has chosen the more conservative herbicidal approach electing to repeat treatments with only glyphosate for three year periods.
- Operational Treatment: ALDOT has divided the State into three functional areas:
  - Outliers - (northward of a line running roughly from Pickens through Montgomery & Barbour Counties): All confirmed locations are treated in their entirety regardless of location.
  - Active Front - (western, southwestern and southeastern Counties): Locations are being confirmed and mapped; those locations that can are completely on ALDOT ROWs are being treated.
  - Far South - (Mobile and Baldwin Counties): The sheer magnitude of the cogongrass has limited ALDOT’s approach and treatment success in these Counties.
- Partnerships: Cooperative efforts with community groups such as SOAR have yielded good control efforts and have opened avenues for public education regarding Cogongrass and its spread.

What We Have Learned:
ALDOT has experienced good control of outliers and even sites within the advancing front using multiple applications of glyphosate as recommended in the Auburn University Report. Persistence is key; repeated applications over two to three years have resulted, to date, in no visible re-growth in treated areas. Cogongrass control in Mobile and Baldwin Counties will definitely require a planned, coordinated effort reaching across many land use boundaries and may, because of the maturity of the stands, require the addition of imazapyr to the treatment regime.